

## Abilene Christian University Digital Commons @ ACU

---

DANGO

Newsletter

---

Summer 5-28-2016

# DANGO (Doings and Goings On)- Vol. 22 | Issue 2

Matthew Kimball  
*Abilene Christian University*

Haley Stien  
*Abilene Christian University*

Cecily Towell

Rusty Towell

Aric Tate

*See next page for additional authors*

Follow this and additional works at: <http://digitalcommons.acu.edu/dango>



Part of the [Engineering Commons](#), and the [Physics Commons](#)

---

### Recommended Citation

Kimball, Matthew; Stien, Haley; Towell, Cecily; Towell, Rusty; Tate, Aric; Hicks, Caleb; Xi, Zhaojia; Martinez, Joshua Daniel; Carstens, Paul; Watson, Shon; Byrd, Reuben; Daugherity, Mike; and Isenhower, Donald, "DANGO (Doings and Goings On)- Vol. 22 | Issue 2" (2016). *DANGO*. Book 2.  
<http://digitalcommons.acu.edu/dango/2>

This Book is brought to you for free and open access by the Newsletter at Digital Commons @ ACU. It has been accepted for inclusion in DANGO by an authorized administrator of Digital Commons @ ACU. For more information, please contact [dc@acu.edu](mailto:dc@acu.edu).

---

**Authors**

Matthew Kimball, Haley Stien, Cecily Towell, Rusty Towell, Aric Tate, Caleb Hicks, Zhaojia Xi, Joshua Daniel Martinez, Paul Carstens, Shon Watson, Reuben Byrd, Mike Daugherity, and Donald Isenhower

## DANGO (Doings and Goings On)

---

### Picture of the Week Winner: “Midnight shift takes a toll on Haley” -Cecily



EDITOR'S NOTE: Thank  
you, snapchat filters

### Group Updates

## **BROOKHAVEN** NATIONAL LABORATORY

*FROM MATTHEW KIMBALL:*

Dear DANGO,

This week has been much more relaxing than last week. We started off with only a few shifts left (the last of which a replacement was late to but oh well). We've gotten to relax and do some more fun things around Long Island. After

Dr. Towell left we went to go see a pretty great aquarium. We've also gotten to go around and have lots of coffee and find the sketchiest coffee shop ever as well as go to Montauk Lighthouse. We also went to the beach which was pretty great.

Have a good one,  
Matthew Kimball

*FROM HALEY STIEN:*

Dear Dango,

Our days off have been so great that I barely remember the couple of night

shifts from earlier this week. Adjusting to being awake during the day was a struggle, and waking up at 1AM to make a sandwich was also weird for me. However, we managed to get back to normal (with the help of caffeine and freezing waves at the beach). We decided that today and tomorrow will be work days, which includes collectively writing a paper about Dr. Towell's NEXT Lab and setting up our office. The last few days, however, consisted of a few beaches, a lighthouse, aquarium, and cute coffee shops. Don't listen to Matthew- that coffee shop was not sketchy. It was just closed and in a weird alley behind some shops.. Anyways, it's been fun riding around in a lovely, giant, blue van and finding cool places to explore. We have dubbed Tend Coffee our favorite coffee place because it is cute and the people are friendly.

-Haley

*FROM CECILY TOWELL:*

Aloha Dango,

Tuesday was our last day on the midnight to 8 AM shift, and was also the day that our fearless leader abandoned us. However he shall be back on Wednesday with reinforcements (AKA my mom and siblings). Since then, we have been exploring the island. We've gone to an aquarium, the cutest light house ever and the beach. We also have discovered our new favorite coffee shop, chosen as the best for its cuteness of course. While the

boss is away, we have been tasked with setting up the office and writing a paper on the NEXT Lab at ACU (if you don't know what that is, visit [www.acunextlab.org](http://www.acunextlab.org) and look up Rusty Towell TED talk- you're welcome). We have also begun plotting to capture the groundhog that lives near us. We shall be victorious.

-Cecily

*FROM DR. RUSTY TOWELL:*

Hello Dango,

This week started the same way last week ended. More owl shifts on PHENIX. We finished taking 62 GeV data and then started taking data at even lower energies. After working until 8AM on Tuesday, I caught a flight back to Abilene. On Friday we will start the drive back to NY.

Happy Memorial Day to all,  
Rusty



*FROM ARIC TATE:*

Hello Everyone,

This was my last week at LANL. The highlight was a 4.5 hour mandatory safety meeting for all of LANSCE to discuss a series of inexcusable accidents. Much was said and even more was learned at

this gathering. I am a better person for having been in attendance. I also went to a graduate student's talk on QGP and PHENIX. I am still not entirely sure what he was doing at LANL. I will now be heading towards New York by way of Texas.

-Aric Tate



*FROM ZHAOJIA XI:*

Hello everyone,

This week has been great. I will work on sqerp (SeaQuest Event Reconstruction Program) this summer and I have already read lots of sqerp documents. Dr. D helped me get the sqerp program and code to plot different things. On Thursday, Dr. David Christian and I had a control access. We went downstairs and replaced a QIE board. Also Dr. I is fixing several high voltage circuit boards right now, he gave me a short lecture about electric circuit. It is always nice to learn and understand physics in real life. I will do day shifts this weekend (Saturday and Sunday), so I hope everything goes well.

Peace out,  
Zhaojia(Tiffany) Xi

*FROM CALEB HICKS:*

This week was mostly low key. I went in for normal work on Monday, but the council decided that it would be good to have two people on the night shift instead of one, so I took Tuesday to flip my schedule and spent the rest of the week on the owl shift. Since I naturally go nocturnal on weekends anyway, and shift is fairly relaxed, this week has been pretty nice. Also, internet has arrived so the apartment is less reminiscent of *Lord of the Flies*.

-Caleb Hicks

*FROM JOSHUA MARTINEZ:*

What's sup DANGO,

This week was rather interesting, as we introduced a new member into our rather small apartment unexpectedly. Having to rush around and set everything up for him to live here was the task for the weekend. Monday and Tuesday consisted of setting up the new arrival to have access to Fermilab as well as receiving training to be able to take shifts. Wednesday we my first shift and it was rather stressful because it wasn't a smooth run. Thursday was by far the smoothest run I have had, only having to stop once for a minor change. Then today (Friday) I did not have a single complete run. Everything went wrong from the main injector to HV power supplies. It was rather interesting in that I learned how to fix what feels like a lot of different problems that SeaQuest could have. All in

all I feel as this week was a very productive week.

Sincerely,  
Joshua Daniel Martinez

*FROM PAUL CARSTENS:*

Greetings and salutations!

It's been another, expectedly slow week as I've been working the night shift since Monday. The beam's been very quiet; there have only been a couple of issues so far, none of which took much more than a reboot to solve. After the first few days alone I began seeing Caleb around the control room, though I suspect he's naught more than a vivid hallucination. The week of shifts isn't over yet, however, so Hallucination-Caleb and I still have another few days till we rejoin diurnal society.

-Paul Carstens

*FROM REUBEN BYRD:*

Dangoo, it's good to be back!

I got to Batavia on Saturday, did all my training on Sunday, and was at work Monday. Apparently I missed the week where my apartment had no internet, but I can live with that. Monday and Tuesday were kind of introductory days for me since I'm new to Fermilab, but since Wednesday Josh and I have been on day shift here. Beam was down most of Friday, so it was really exciting. It's been good, though, since I'm still getting used to how

things are here as opposed to at Brookhaven. I think we may go downtown this weekend, we'll see!

Peace,  
Reuben

*FROM SHON WATSON:*

Dear DANGO,

This week, I continued to work with the Lecroy 1440 high voltage power supplies. I spent more time working on sqerp (a SeaQuest track finding and fitting program). I found it interesting that sqerp uses the MINUIT minimization library for fitting the tracks. I hope my past experiences with MINUIT will come in handy.

Today, I just finished re-upping my controlled access training. I have also been trying to learn the updated shifting procedures in preparation for my swing shifts next week.

-Shon Watson

*FROM DR. MIKE DAUGHERITY:*

Dearest DANGO,  
SQERP!

One of the big problems with students is that when they just start to get really interesting and useful, then they leave. SeaQuest has lost several grad students and postdocs, leaving a major crisis of exciting opportunities for us to work on. One of these is the SeaQuest Event Reconstruction Program, or

SQERP. Shon, Zhaojia, and I have starting squerping along with some other grad students. Once we figure out the code we'll have about seven months of data to reconstruct. It is going to be a great summer.

-Dr. D

*FROM DR. DONALD ISENHOWER:*

Dear Hard working students,

This week has been spent working on LeCroy power supplies and controllers, while giving lessons. Sometimes these lessons have been on these same things as to how if you don't read the schematics of the device it is easy to set yourself up to die. You pick up this nice drawing, and it innocently identifies itself in the lower right hand corner of the blueprint as "LeCroy +5.3V Power Supply." You work though the circuit (unpowered) and trace out the 5.3 V power circuit, then notice this section that just doesn't seem necessary. You look a little closer and discover its output is 350V DC sitting in the middle of the circuit diagram with nothing to call attention to itself. After this you check the +15V and -15V supplies and discover all three have this circuit buried in the middle of the circuit diagram. Each of them also have capacitors on them that make each one lethal. Oh the fun of working on electronics designed by people who happen to leave off small "footnotes!"

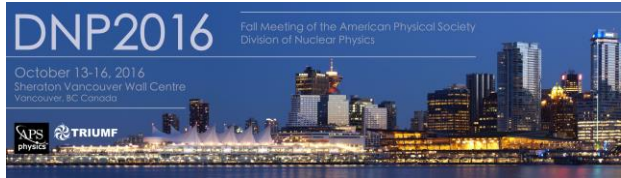
On the "helping students" front, Cindy found mattresses and box springs

for the two poor students who have been sleeping on air mattresses. We don't have bed frames, but hey, you can't get everything! Cindy and I have found a longterm housing arrangement that the lab has set up with Homewood Suites. The nice thing is that it avoids taxes and comes with a shuttle that will take Cindy up to 5 miles in any direction she want to go. It's not too far from the lab and is cheaper than anything I could work out on my own. So we'll have a place to live after Beth D. gets up here and we have to leave the lab apartment.

Now it's back to figuring out why a controller I was working on yesterday was talking to me then, but is refusing today. Dr, I. from the exciting land of the buffalo, geese, foxes, deer, coyotes, pheasants, squirrels, snakes, and many other critters running around outside our area.

-Dr. I.

## In Other News...



**SAVE THE DATE! APS DNP CEU**  
(AKA the American Physical Society  
Division of Nuclear Physics' Conference  
Experience for Undergraduates)

**WHERE:** Vancouver, BC (Canada)

**WHEN:** Oct. 13 – 16, 2016

**WHAT:** This meeting gives undergrads the opportunity to present their nuclear physics research in a conference setting and listen to presentations from physicists from around the world. Travel and lodging awards are awarded on a competitive basis.

## Picture of the week candidates

Dr. D: “Hot weather and torrential rain caused the ceiling in the control room to leak blue water. I'm proud to introduce Lupe, the hardest working member of the SeaQuest shift crew.



Zhaojia: “Wilson Hall, Fermilab”





Cecily: “Somehow made it all the way back from the beach like this.”



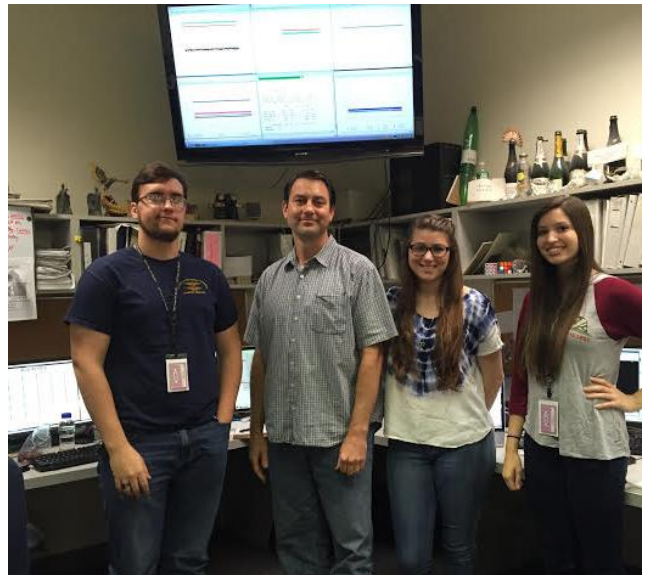
Also Haley: “The cutest lighthouse.”



Haley: “Apparently burritos alarm the security guards..”



Dr. Towell:



Matthew: "From inside the lighthouse."



## Coffee of the Week

Tend Coffee- Birthday Cake Latte

